

IN THE CLAIMS

1. (currently amended) A chimeric protein comprising: 1) a first polypeptide ~~possessing matrix modification activity selected from the group consisting of chondroitinases, hyaluronidases, and matrix metalloproteinases~~; and 2) a second polypeptide possessing regenerating activity for neural cells, said first and second polypeptides not occurring together in nature and being joined together in said chimeric protein.
2. (canceled)
3. (currently amended) The chimeric protein of claim ~~2~~ 1 wherein the chondroitinase is selected from the group consisting of chondroitinase ABC exolyase, chondroitinase ABC endolyase, Chondroitinase AC, and Chondroitinase B.
4. (canceled)
5. (currently amended) The chimeric protein of claim 1 wherein the second polypeptide is selected from the group consisting of Neural Cell Adhesion molecules (N-CAM), L1, ~~N-CAM~~, myelin-associated glycoproteins, laminins, fibronectins, cadherins, Tenascins, fibronectin type-III (FN-III) repeats A-D (FnA-D), M1 antibodies, nectrins, neural antigen BSP-2 (mouse N-CAM), neural antigen D-2, neural antigen 224-1A6-A1, nerve growth factor-inducible large external glycoprotein (NILE), Nr-CAM, TAG-1 (axonin-1), Ng-CAM, F3/F11, integrins, J1, Fasciclin III, myelin-associated glycoprotein (MAG molecules) and neurotrophic factors.
6. -8. (canceled)
9. (currently amended) The chimeric protein of claim 5 wherein the neurotrophic factor is selected from the group consisting of neural growth factor (NGF), brain-derived neurotrophic factor (BDNF), neurotrophin-3 (NT-3), insulin-like growth factor (IGF), epidermal growth factor (EGF), vascular endothelial growth factor (VEGF), fibroblast growth factor (FGF), platelet-

derived growth factor (PDGF), transforming growth factor alpha (TGF α) and transforming growth factor beta (TGF β).

10. (currently amended) The chimeric protein of claim 1 wherein the first polypeptide is joined to the second polypeptide by a peptide ~~linkage~~ linker.

11. (currently amended) The chimeric protein of claim 9 wherein the peptide ~~linkage~~ linker is an Fc portion of an immunoglobulin.

12. -21. (canceled)

22. (currently amended) A pharmaceutical composition comprising a therapeutically effective amount of a chimeric protein in combination with a pharmaceutically acceptable carrier, wherein the chimeric protein comprises: 1) a first polypeptide ~~possessing matrix modification activity selected from the group consisting of chondroitinases, hyaluronidases, and matrix metalloproteinases~~; and 2) a second polypeptide possessing regenerating activity for neural cells, said first and second polypeptides being joined by a peptide linkage in said chimeric protein.

23. -24. (canceled)

25. (new) The pharmaceutical composition of claim 22 wherein the therapeutically effective amount of chimeric protein achieves 1 to 100 micro molar concentration.

26. (new) The pharmaceutical composition of claim 22 wherein the therapeutically effective amount of chimeric protein is 1 to 50 micrograms per kilogram of body weight.